Amendments to the Claims:

1-18. (Canceled)

19. (Currently Amended) A DNA construct for providing a heterologous immunoglobulin in the milk of a non-human transgenic mammal comprising a promoter sequence that results in the preferential expression of a protein-coding sequence in mammary gland epithelial cells, an immunoglobulin protein-coding sequence, a 3' non-coding sequence; and a unique restriction site between the promoter and the 3' non-coding sequence, wherein the immunoglobulin protein-coding sequence is inserted into the restriction site; and wherein said DNA construct is integrated into the genome of said mammal in such a way that said protein-coding sequence is expressed in the mammary gland of said mammal, and secreted from said mammary gland in the milk of said mammal; and,

wherein the expressed immunoglobulin protein sequence is primarily or completely of human origin, wherein each coding region may be expressed individually and,

wherein the immunoglobulin protein-coding sequence encodes a heavy chain coding region;

wherein said immunoglobulin protein-coding sequence encodes a light chain coding region.

20. (Canceled)

21. (Currently Amended) The construct of claim 19 wherein said promoter is selected from the group consisting of [the] a beta lactoglobulin promoter, a whey acid protein promoter, and the lactalbumin promoter.

22-24. (Canceled)

25. (Currently Amended) The construct of claim 19 wherein said promoter is [the] a casein promoter.

26. (Previously Presented) The construct of claim 19, wherein the restriction site is an XhoI restriction site.

27. (Previously Presented) The construct of claim 19, wherein the 3' non-coding sequence is a 3' non-coding region from a mammary-specific gene.

28. (Canceled)

29. (Currently Amended) A mammary gland epithelial cell comprising the construct of claim 19 [22] and a construct comprising an immunoglobulin protein-coding sequence which encodes both a light chain and a heavy chain ~~or a fragment thereof~~, operatively linked to a promoter sequence that results in the preferential expression of the protein-coding sequence in mammary gland epithelial cells, wherein the cell expresses the light and heavy chains separately and secretes a heterologous, assembled immunoglobulin comprising the light and heavy chains ~~in functional form concomittantly~~.

30. (Currently Amended) A mammary gland epithelial cell comprising the construct of claim [28] 19 further comprising ~~and a construct comprising an immunoglobulin protein coding sequence which encodes a light chain or a fragment thereof, operatively linked to a promoter sequence that results in the preferential expression of the protein coding sequence in mammary gland epithelial cells,~~ wherein the cell expresses the light and heavy chains separately and the sequences so expressed are fully human sequences ~~and secretes a heterologous, assembled immunoglobin comprising [the] light and heavy chains~~

~~in functional form concomittantly~~; and,

wherein said promoter sequence is selected from a group consisting of: beta lactoglobulin promoter, casein promoter, whey acid protein promoter, and the lactalbumin promoter.

31. (New) A non-human transgenic mammal comprising the insertion of two separate DNA constructs into the genome of said non-human transgenic mammal such that when both are expressed in combination they provide for the production of a heterologous immunoglobulin in the milk of a non-human transgenic mammal, each said DNA construct comprising a promoter sequence, a DNA sequence providing an immunoglobulin protein-coding sequence, a 3' non-coding sequence for each construct; and a unique restriction site between the promoter sequences and the 3' non-coding sequence;

wherein each of the immunoglobulin protein-coding sequences are inserted into a different vector; and wherein each of the two said DNA constructs are integrated into the genome of said mammal in such a way that a first and a second immunoglobulin protein-coding sequence are expressed in the mammary gland of said mammal, and secreted from said mammary gland in the milk of said mammal; and,

wherein the expressed immunoglobulin protein sequence is primarily or completely of human origin, wherein said first and said second immunoglobulin protein coding region may be expressed individually and,

wherein said first immunoglobulin protein-coding sequence encodes a heavy chain coding region;

wherein said second immunoglobulin protein-coding sequence encodes a light chain coding region.

32. (New) The transgenic mammal of claim 31, further comprising a first vector and a second vector used to insert said first and said second immunoglobulin protein coding regions into the genome of said transgenic mammal.

33. (New) The construct of claim 31 wherein said promoter is selected from the group consisting of a beta lactoglobulin promoter, a casein promoter, a whey acid protein promoter, and the lactalbumin promoter.

34. (New) The construct of claim 31, wherein at least one restriction site is an XhoI restriction site.

35. (New) The constructs of claim 31, wherein the 3' non-coding sequences of each construct are 3' non-coding regions from a mammary-specific gene.